

NOTES:

1. PLANTING INCLUDES REMOVAL OF STAKES ONE YEAR AFTER INSTALLATION.
2. SHAPE SOIL SURFACE TO PROVIDE 3" DIAM WATERING RING.
3. TREE CLEARANCE SHALL BE PER STD PLAN NO 030.
4. SEE STD PLAN NO 424 FOR TREE PIT DETAIL.
5. ADJUST TREE TIES DURING ESTABLISHMENT TO ALLOW ROOM FOR GROWTH (@1" SLACK).
6. ROOT BARRIER REQUIRED ALONG EDGE OF ROADWAY, CURB, DRIVEWAY, TRAIL, SIDEWALK, OR OTHER STRUCTURES WHERE ROOTBALL IS WITHIN TWO FEET; PLACE VERTICAL ROOTBARRIER AS SHOWN IN STANDARD PLANS 424A OR 424B UNLESS OTHERWISE INDICATED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

STAKE TREE WITH (2) TREATED 2"Ø LODGEPOLE PINE DOWLED TREE STAKES (8'-0" LENGTH) LOOP EACH TIE AROUND HALF TREE LOOSELY TO PROVIDE 1" SLACK FOR TRUNK GROWTH.

"CHAINLOCK" OR EQUAL TREE TIE MATERIAL (1" SIED) NAIL OR STAPLE TREE TIE MATERIAL TO STAKE TO HOLD VERTICALLY. LOOP EACH TIE AROUND HALF TREE LOOSELY TO PROVIDE 1" SLACK FOR TRUNK GROWTH.

2"-3" MULCH DEPTH (TAPERED AT TRUNK)

MULCH TREE PIT MIN 5'-0" LENGTH X FULL PLANTING STRIP WIDTH BETWEEN CURB AND SIDEWALK (FOR PLANTING STRIPS LESS THAN 6'-0" WIDE) OR PROVIDE 5'-0"DIA MULCH RING FOR PLANTING STRIPS WIDER THAN 6'-0".

SIDEWALK

18" ROOTBARRIER AT SIDEWALK.

ROUGHEN SIDES OF PLANTING HOLE MAXIMIZE EXCAVATED AREA WITHOUT UNDERMINING ADJACENT PAVING/CURB.

ROOTBARRIER; PLACE AT EDGE OF PAVEMENT/SIDEWALK/ETC.; PLACE PRIOR TO PLACEMENT OF NEW SIDEWALK OR CURB TO PREVENT UNDERMINING.

TOP SOIL TYPE B, OR AS APPROVED BY ENGINEER.

REMOVE ALL WIRE, STRINGS, AND OTHER NON-BURLAP MATERIAL; AND REMOVE BURLAP FROM TOP 2/3 OF ROOTBALL.

UNDISTURBED SUBGRADE (PROVIDES FIRM BASE SO THAT ROOTBALL WILL NOT SINK).

2'-0" MIN 3'-6" MIN

SET TOP OF ROOT CROWN 2" ABOVE ADJACENT CURB & SIDEWALK GRADE.

3" TO 4" HIGH WATERING RING (SEE NOTE 2)

24" ROOTBARRIER AT CURB.

TREE PIT DEPTH = ROOTBALL DEPTH (MEASURE BEFORE DIGGING TO AVOID OVEREXCAVATION).

DRIVE STAKES 6" TO 1'-0" INTO UNDISTURBED SOIL BELOW ROOTBALL.

MIN WIDTH OF TREE PIT = 2 TIMES ROOTBALL DIAMETER OR 5'-0", WHICHEVER IS GREATER

MULCH AREA TO BE CLEAR OF GRASS, WEEDS, ETC. TO REDUCE COMPETITION WITH TREE ROOTS

DRIVE STAKE AT ROOTBALL EDGE (TYP)(SEE NOTE 1)

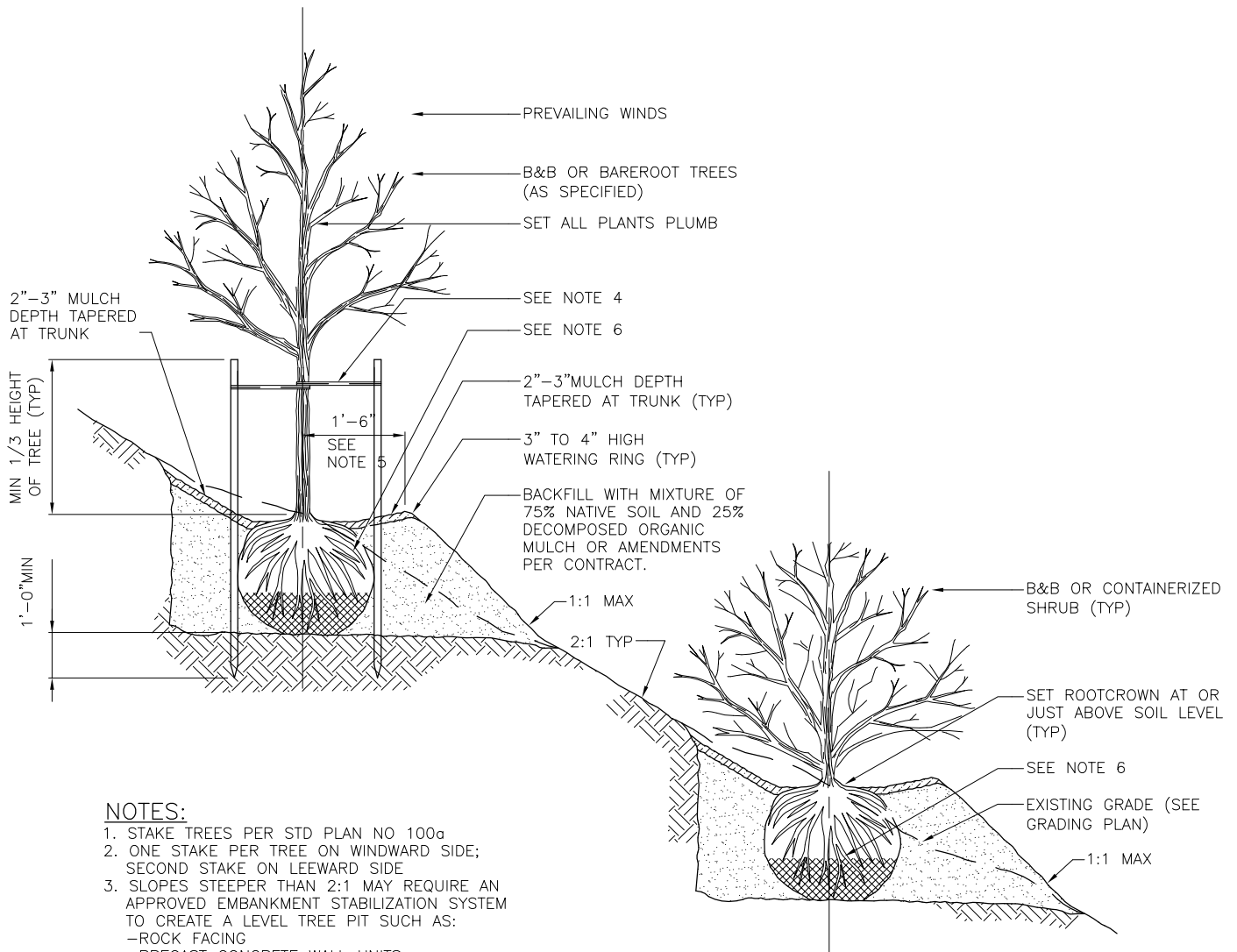
REF STD SPEC SEC 8-02



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NOT TO SCALE

DECIDUOUS TREE PLANTING
IN PLANTING STRIP



NOTES:

1. STAKE TREES PER STD PLAN NO 100a
2. ONE STAKE PER TREE ON WINDWARD SIDE; SECOND STAKE ON LEEWARD SIDE
3. SLOPES STEEPER THAN 2:1 MAY REQUIRE AN APPROVED EMBANKMENT STABILIZATION SYSTEM TO CREATE A LEVEL TREE PIT SUCH AS:
 - ROCK FACING
 - PRECAST CONCRETE WALL UNITS
 - TIMBER WALL
 - MANUFACTURED SLOPE RETENTION UNITS
4. CHAINLOCK TREE TIE. LOOP EACH TIE AROUND TREE LOOSELY TO PROVIDE 1" SLACK FOR DIAMETER GROWTH.
5. SHAPE SOIL TO PROVIDE 3' DIAMETER OR ROOTBALL DIAMETER, WHICHEVER IS GREATER, WATERING RING.
6. REMOVE ALL WIRE, STRINGS, AND OTHER NON-BURLAP MATERIAL; AND REMOVE BURLAP FROM TOP 2/3 OF ROOTBALL.

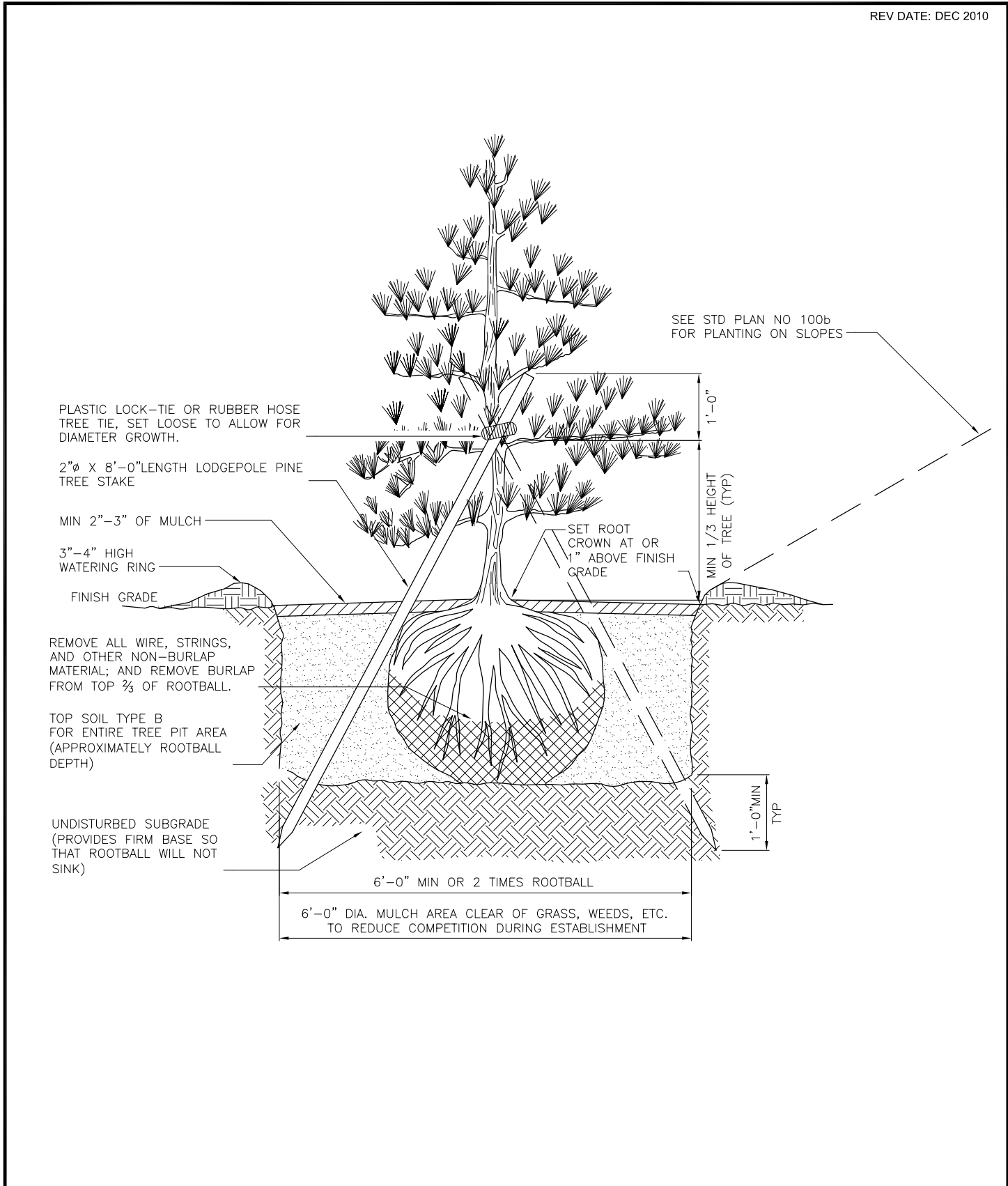
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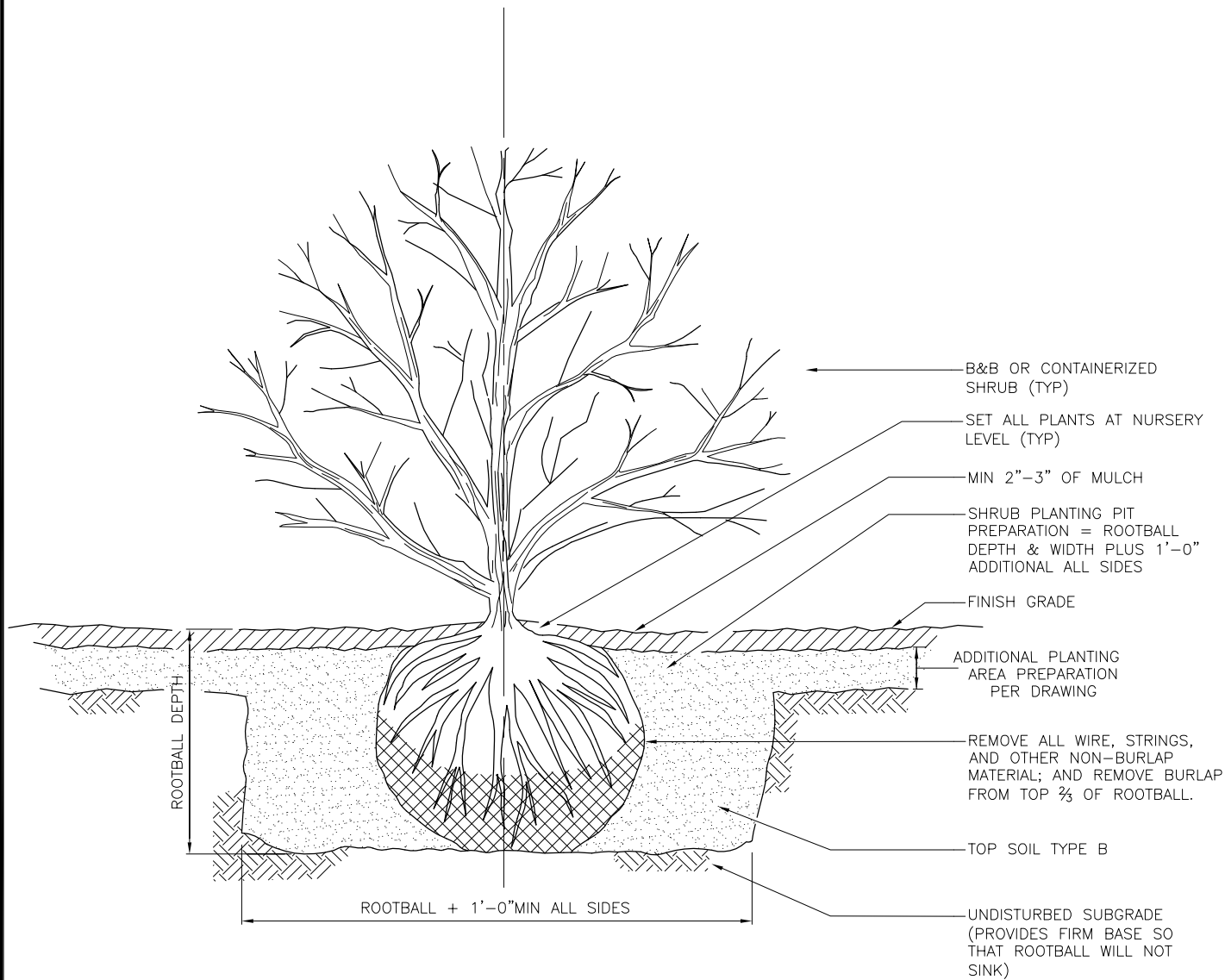


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**TREE & SHRUB PLANTING
ON SLOPES**





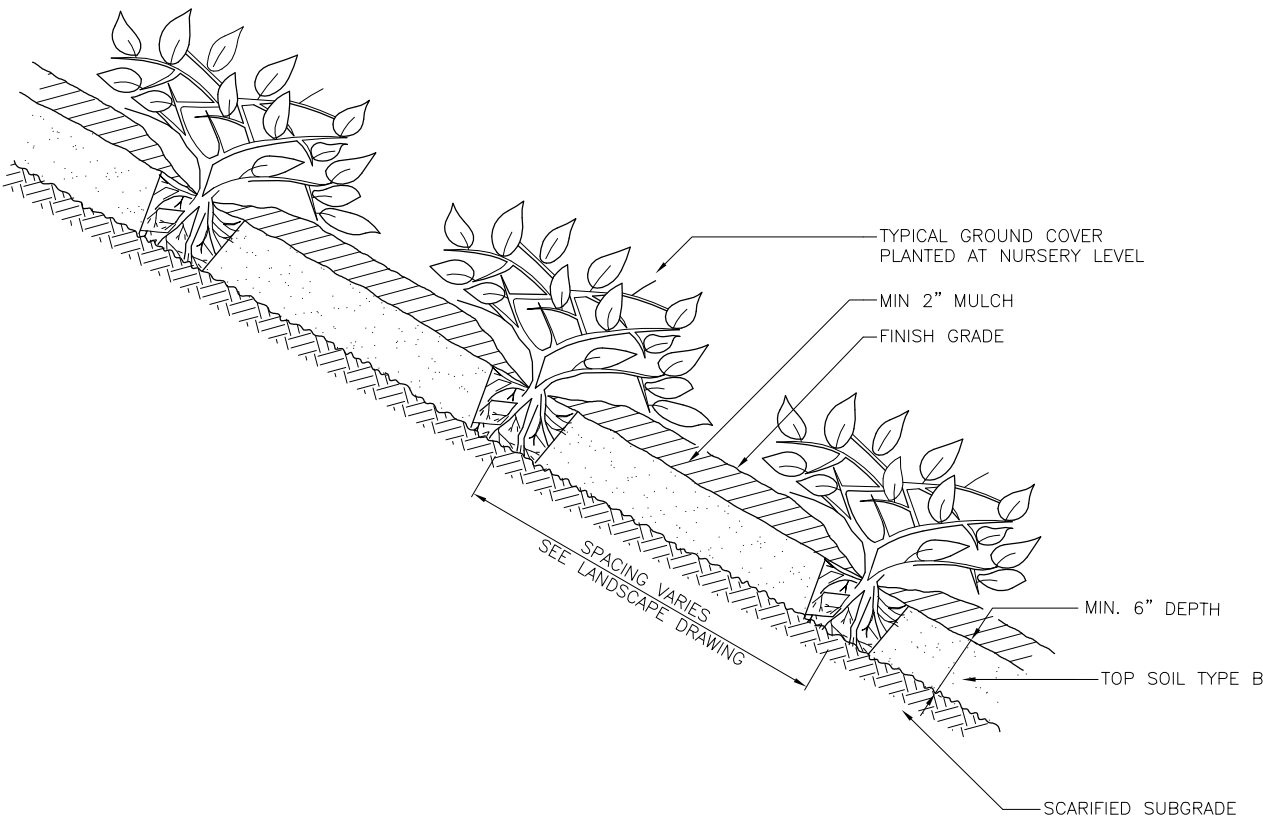
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SHRUB PLANTING



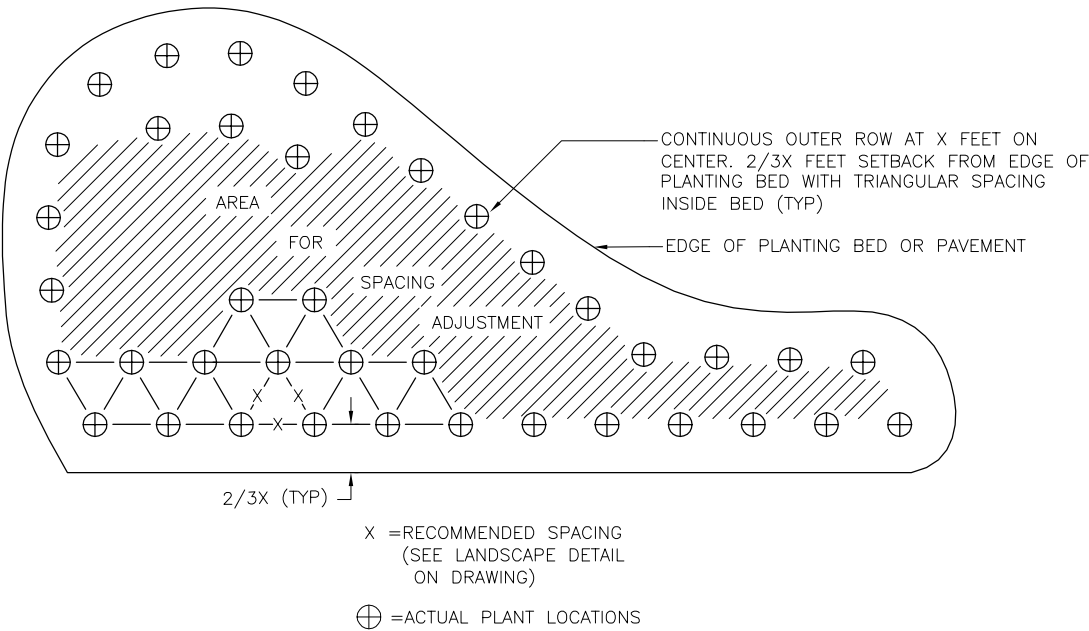
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GROUND COVER PLANTING



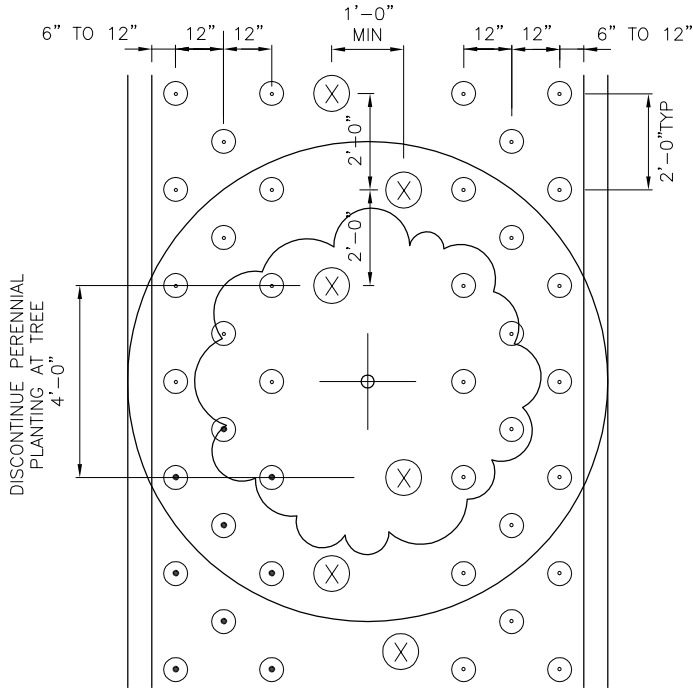
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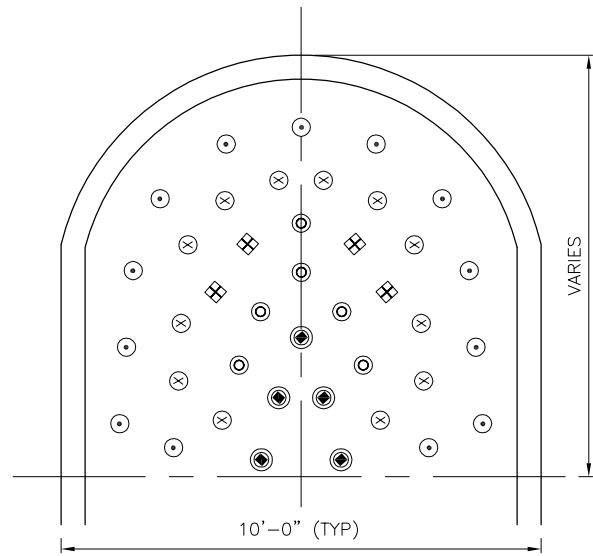
PLANTING PATTERN



QUANT PER
10'-0" LF MEDIAN

⊙ GROUNDCOVER	30
⊗ SHRUB	5

DETAIL AT TREE
PLAN



QUANT PER
END CAP

⊠ PERENNIAL TYPE 1	4
⊙ PERENNIAL TYPE 2	6
⊗ PERENNIAL TYPE 3	5
⊙ EVERGREEN GROUNDCOVER TYPE 1	13
⊗ EVERGREEN GROUNDCOVER TYPE 2	12

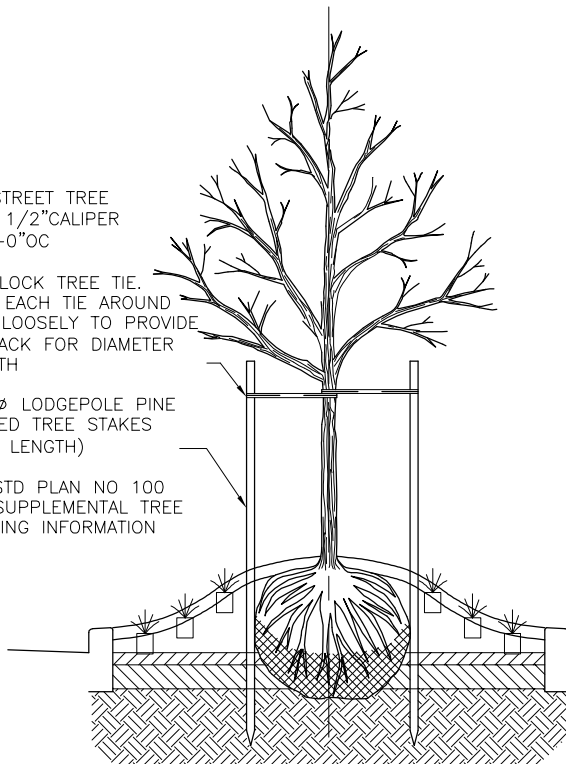
END CAP DETAIL

TYP STREET TREE
2"-2 1/2" CALIPER
@ 30'-0" OC

CHAINLOCK TREE TIE.
LOOP EACH TIE AROUND
TREE LOOSELY TO PROVIDE
1" SLACK FOR DIAMETER
GROWTH

(2) 2" Ø LODGEPOLE PINE
DOWELED TREE STAKES
(8'-0" LENGTH)

SEE STD PLAN NO 100
FOR SUPPLEMENTAL TREE
PLANTING INFORMATION



ELEVATION

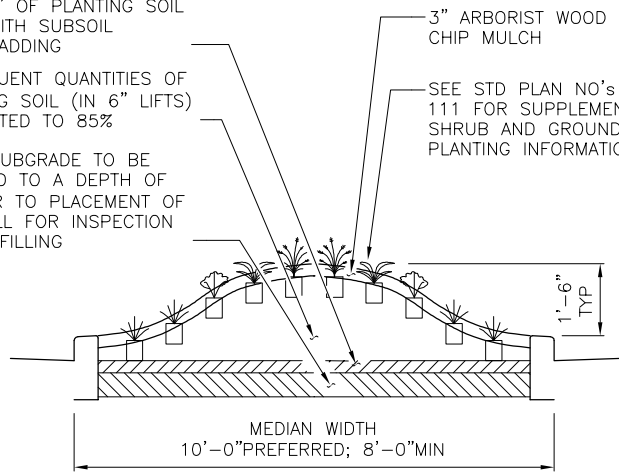
PLACE 3" OF PLANTING SOIL
& MIX WITH SUBSOIL
BEFORE ADDING

SUBSEQUENT QUANTITIES OF
PLANTING SOIL (IN 6" LIFTS)
COMPACTED TO 85%

NATIVE SUBGRADE TO BE
SCARIFIED TO A DEPTH OF
6" PRIOR TO PLACEMENT OF
FILL. CALL FOR INSPECTION
BEFORE FILLING

3" ARBORIST WOOD
CHIP MULCH

SEE STD PLAN NO's 110 &
111 FOR SUPPLEMENTAL
SHRUB AND GROUNDCOVER
PLANTING INFORMATION



SOIL PREPARATION DETAIL

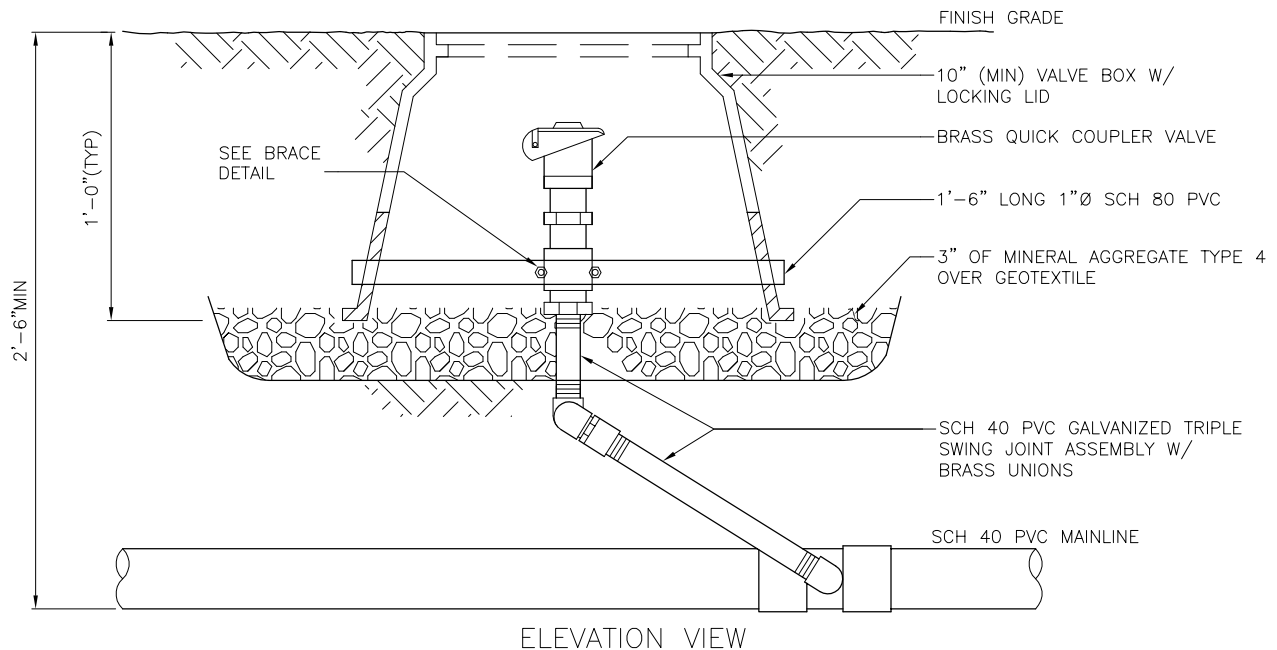
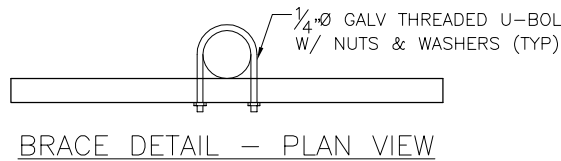
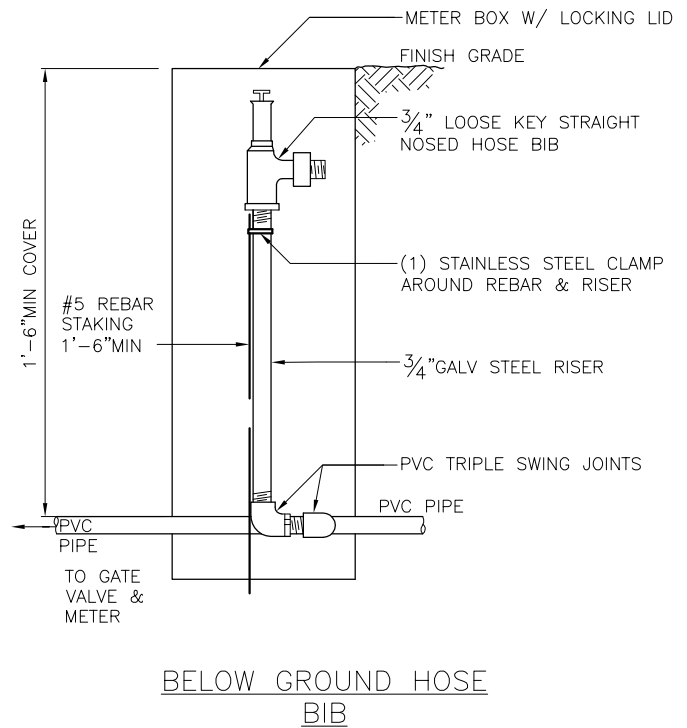
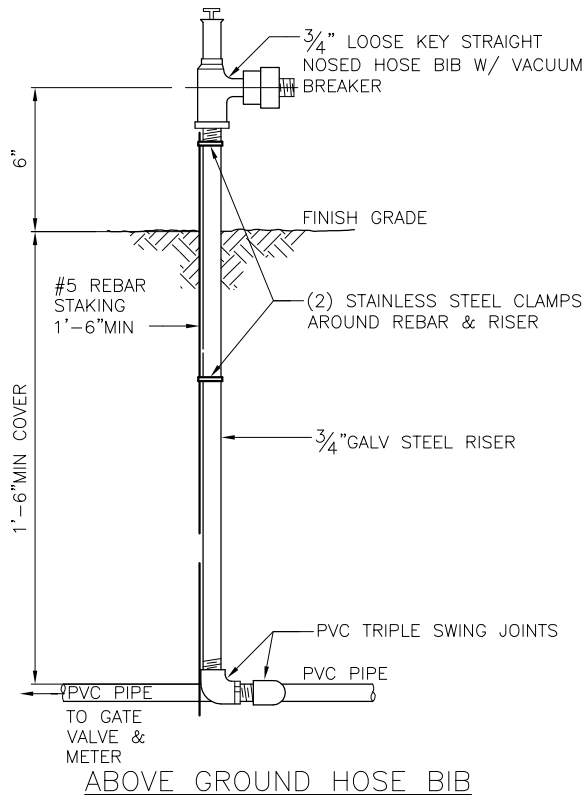
REF STD SPEC SEC 8-02



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MEDIAN PLANTING



QUICK COUPLER VALVE
TURF OR BED AREAS

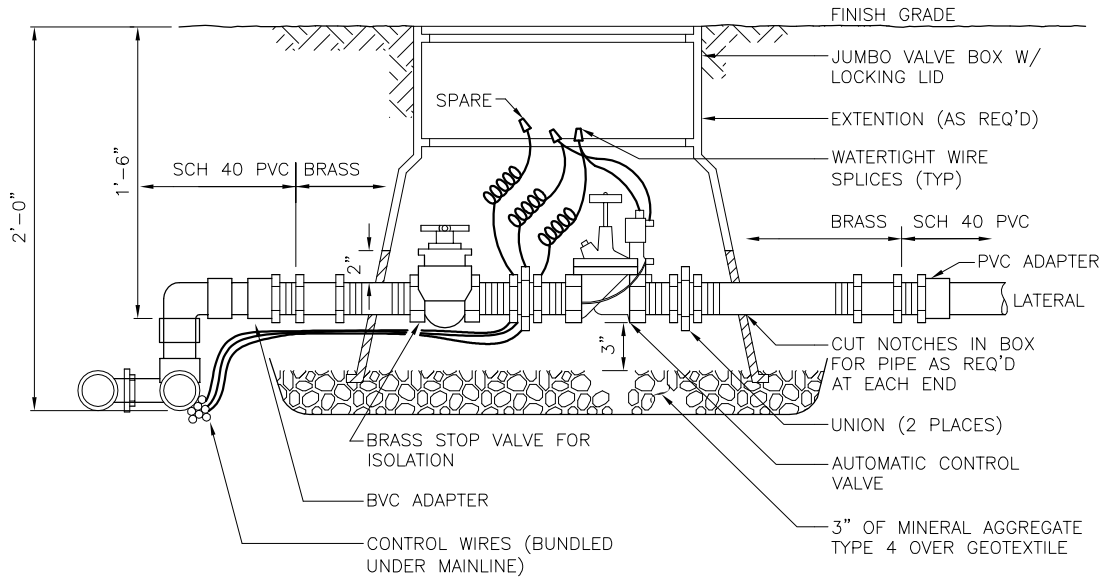
REF STD SPEC SEC 8-03



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NOT TO SCALE

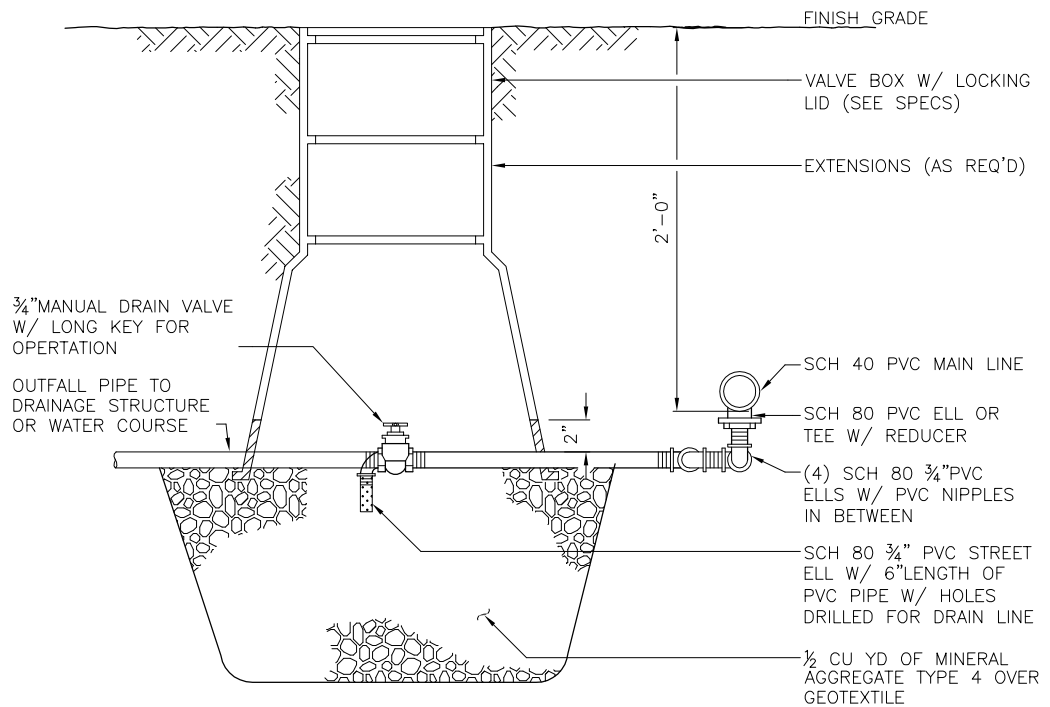
**HOSE BIB ASSEMBLY AND
QUICK COUPLER VALVE**



NOTE:

"U" SHAPED CUT-OUT IN VALVE BOX THAT ALLOWS 2" CLEARANCE FROM TOP OF PIPE TO TOP OF "U"

AUTOMATIC CONTROL VALVE



MANUAL DRAIN VALVE

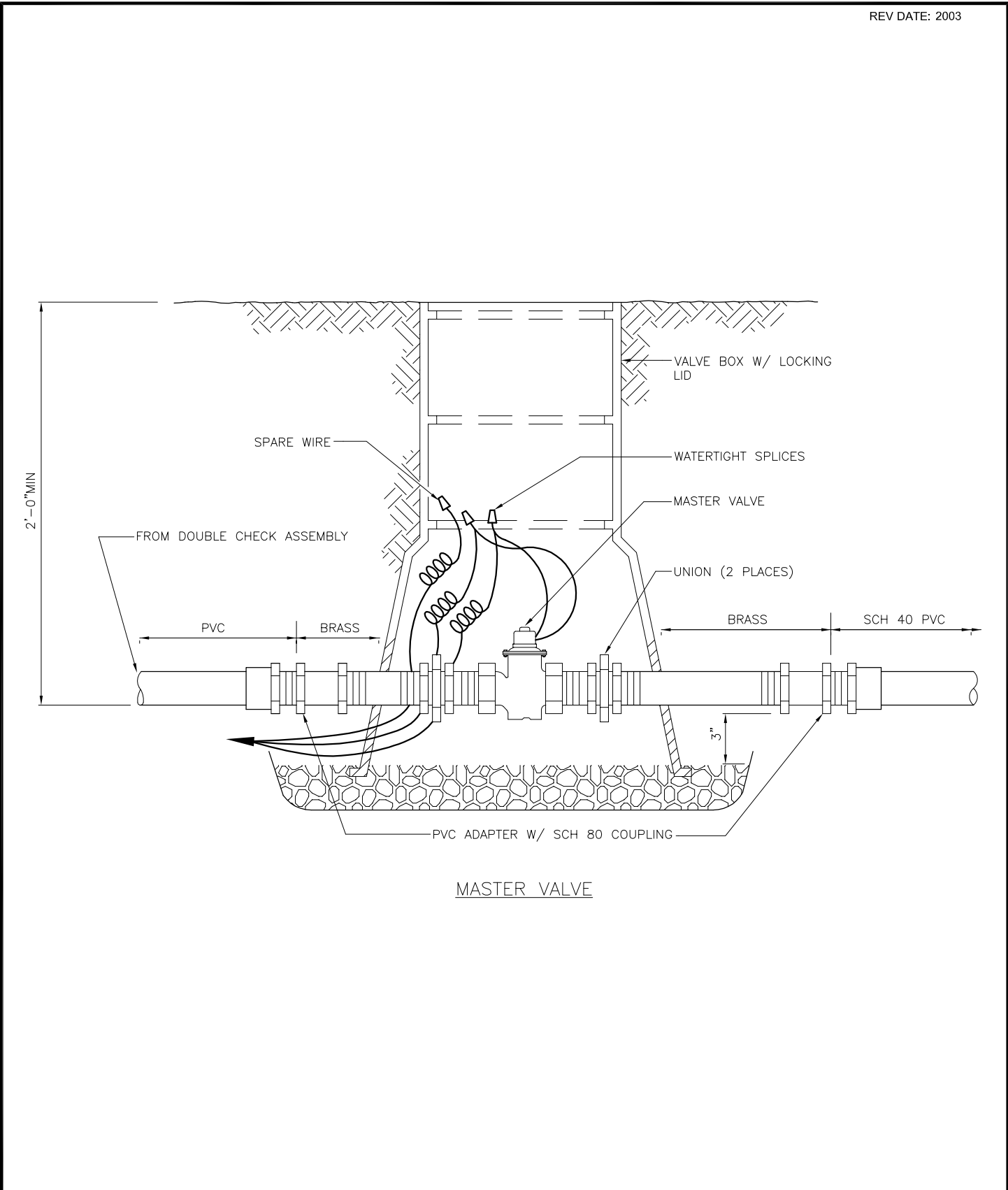
REF STD SPEC SEC 8-03



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NOT TO SCALE

IRRIGATION VALVES



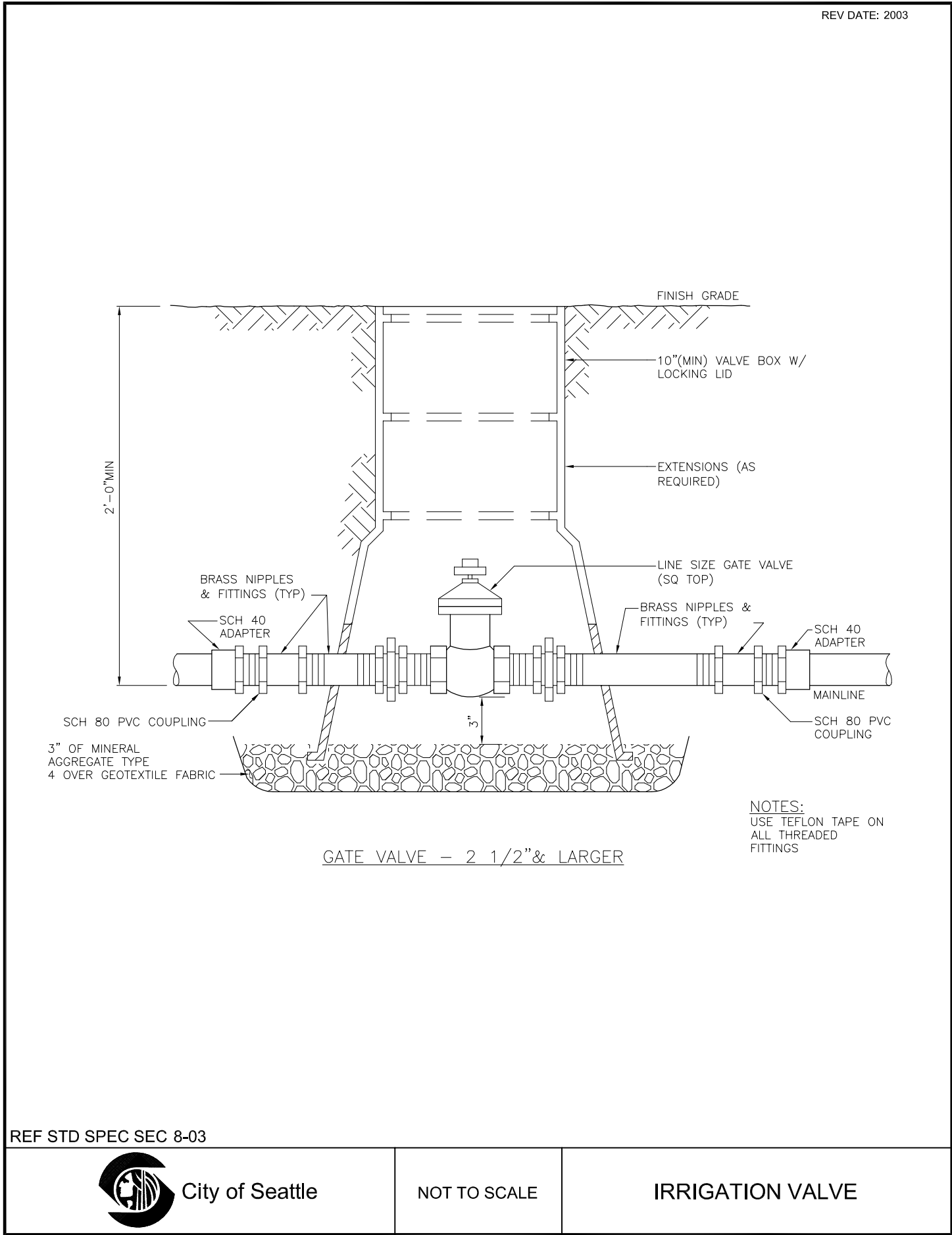
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IRRIGATION VALVES



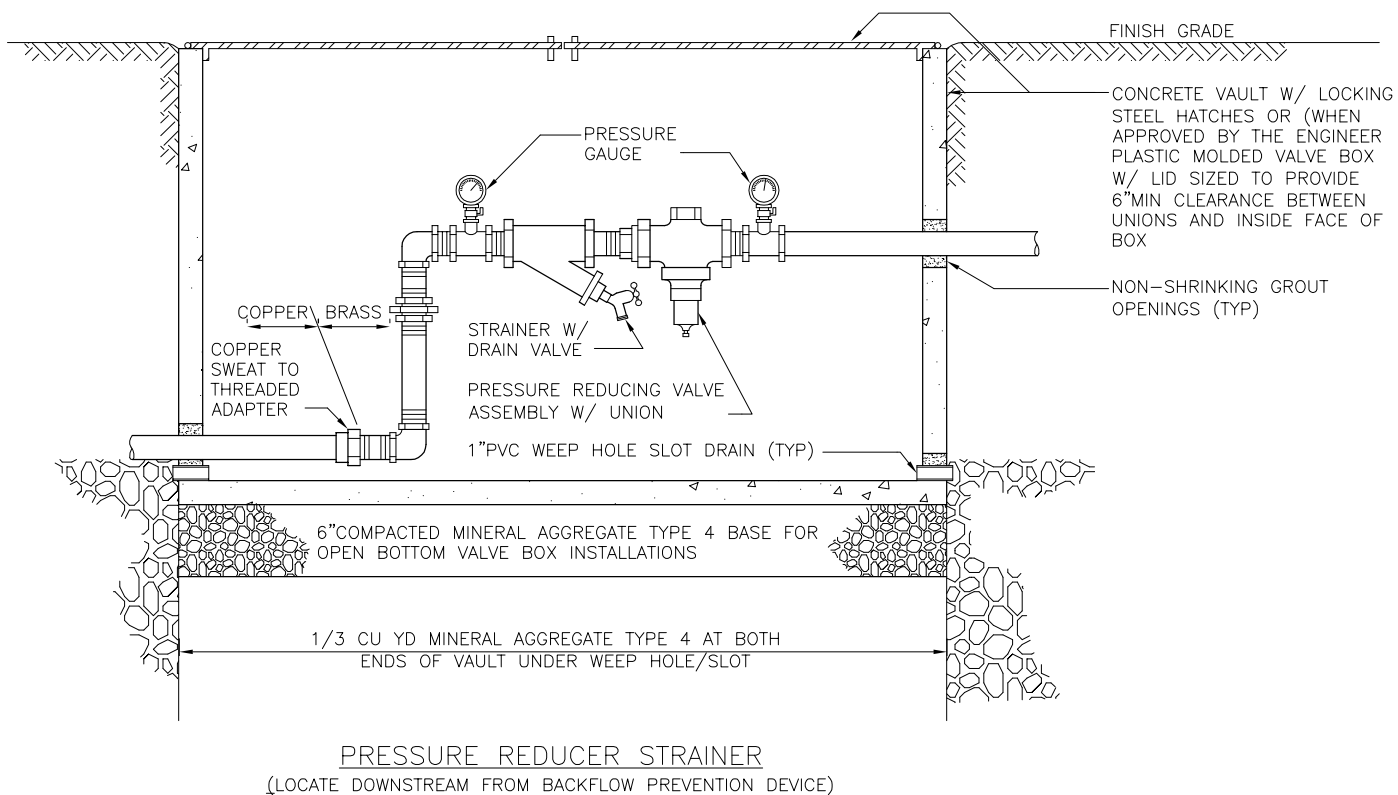
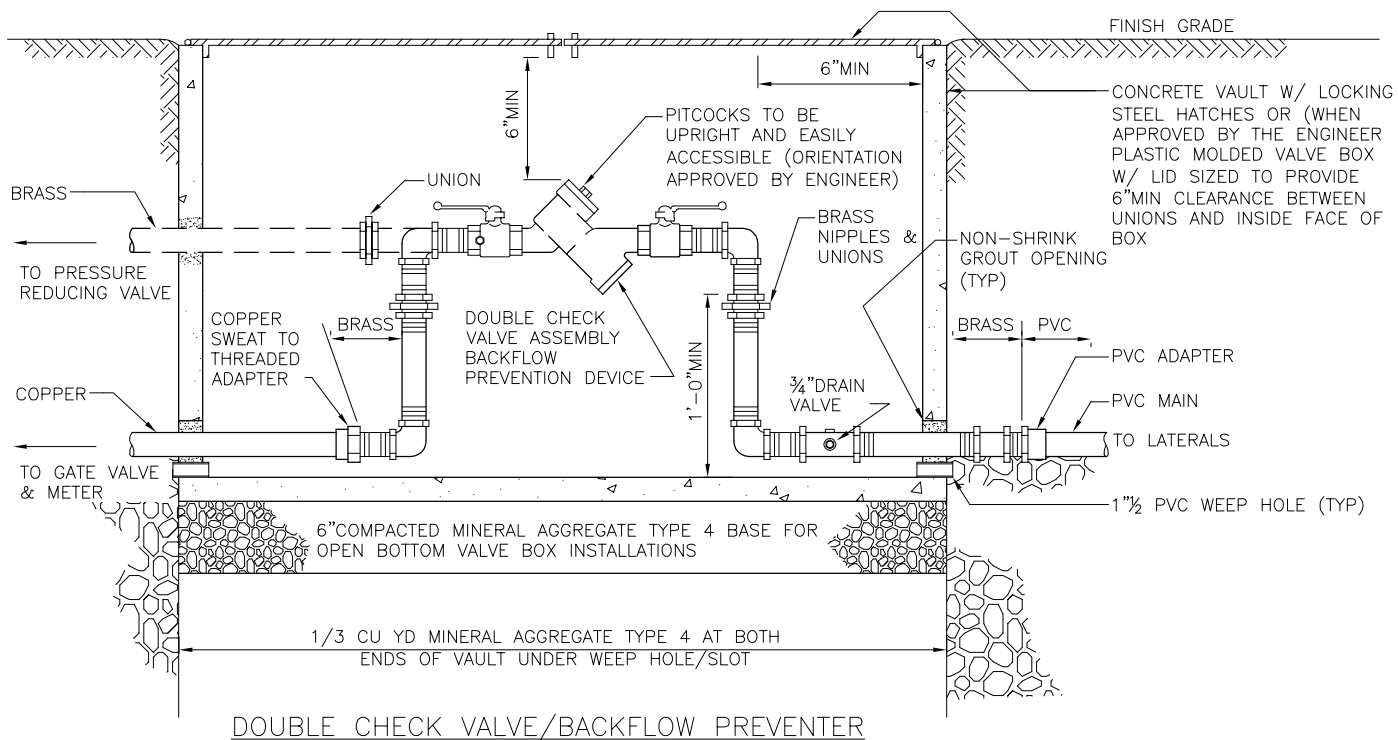
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NOT TO SCALE

IRRIGATION VALVE



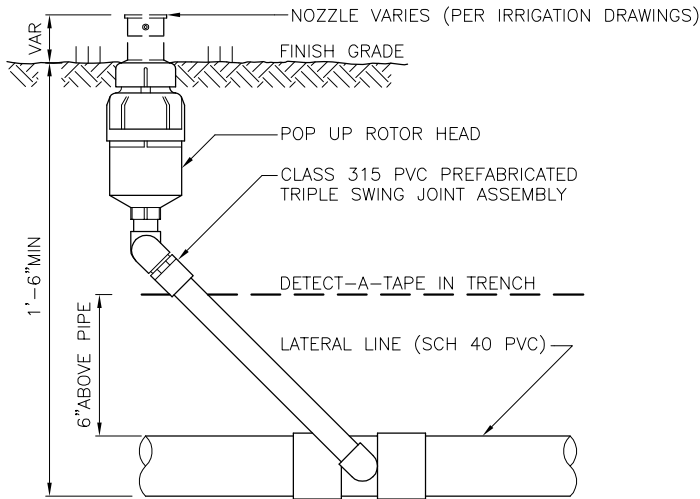
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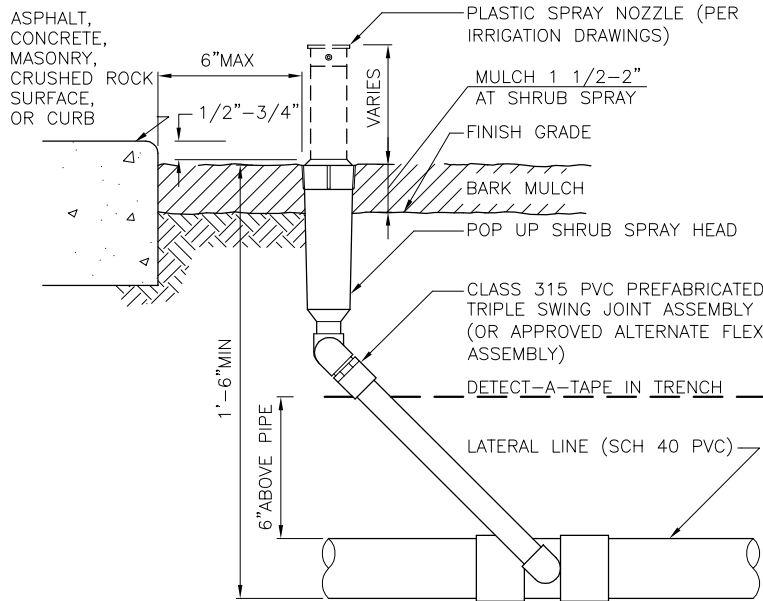
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IRRIGATION VALVES

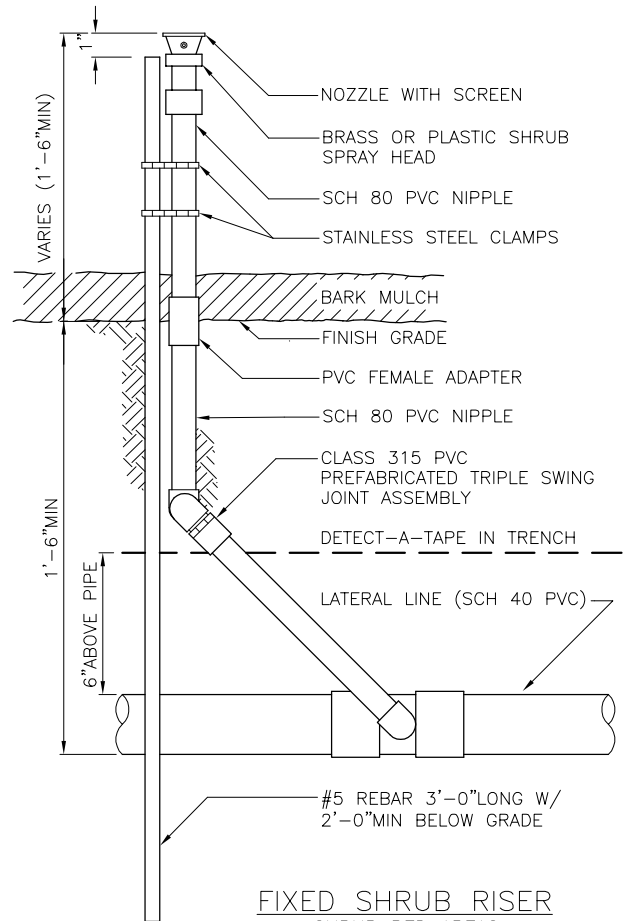


POP UP ROTOR HEAD
TURF AREAS

NOTE:
USE TEFLON TAPE ON
ALL THREADED FITTINGS



POP UP ROTOR HEAD
(SHRUB BED AREAS)
AT EDGE OF PAVEMENT



FIXED SHRUB RISER
SHRUB BED AREAS

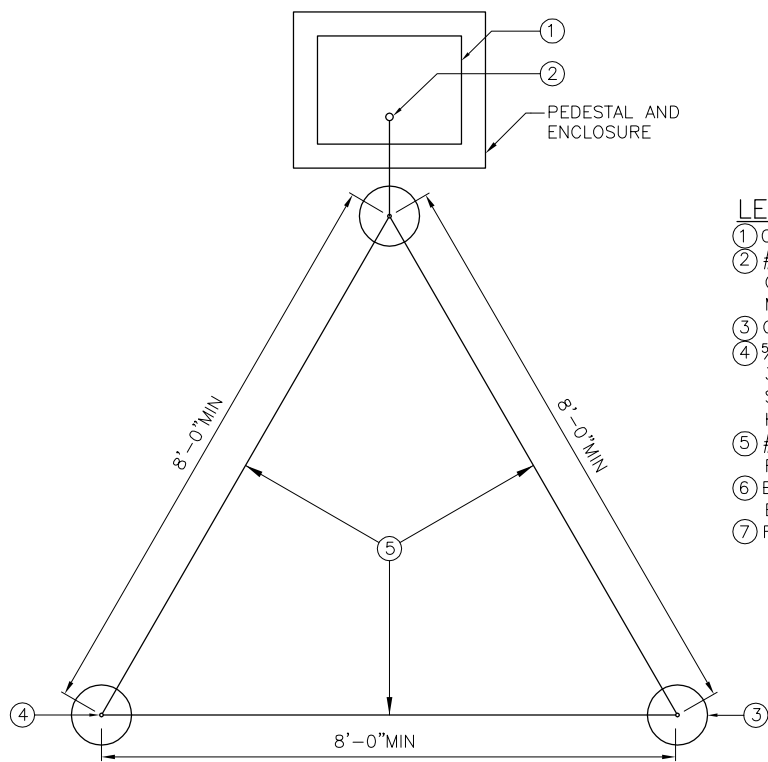
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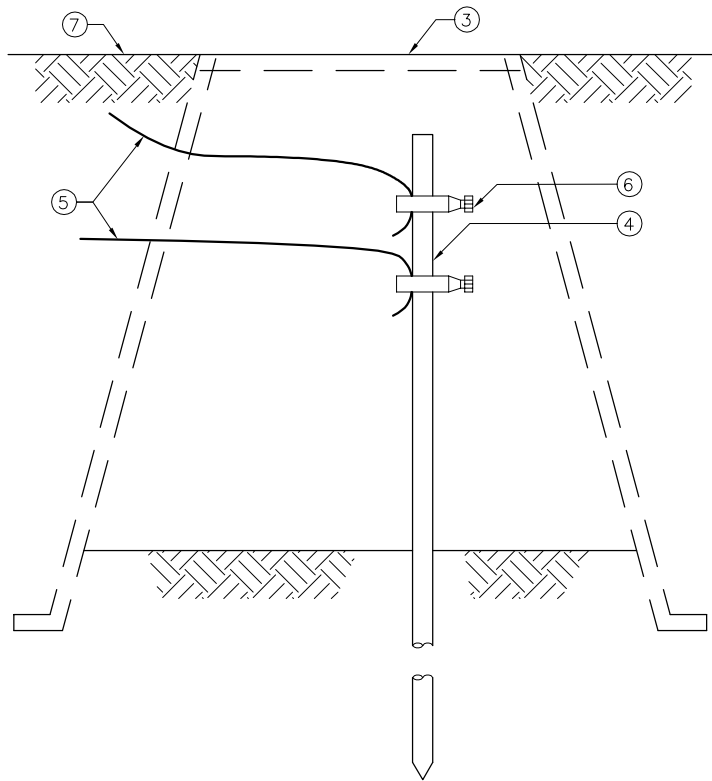
NOT TO SCALE

POP UP & FIXED
IRRIGATION HEADS



GROUND ROD LAYOUT

- LEGEND**
- ① CONTROLLER
 - ② #10 AWG SOLID BARE COPPER WIRE FROM GROUNDING ROD TO CONTROLLER. MAKE WIRE AS SHORT AS POSSIBLE
 - ③ COVER GROUNDING ROD WITH 10" ROUND VALVE BOX
 - ④ 5/8" X 10'-0" COPPER CLAD GROUNDING ROD. INSTALL 3 RODS IN SOIL IN A TRIANGULAR PATTERN, SPACES 8'-0" MIN APART. GROUNDING GRID TO HAVE A RESISTANCE OF 10 OHMS OR LESS
 - ⑤ #10 AWG BARE COPPER WIRE BETWEEN GROUNDING RODS
 - ⑥ BRASS WIRE CLAMP. USE SEPARATE CLAMP FOR EACH WIRE
 - ⑦ FINISH GRADE



GROUND ROD ASSEMBLY

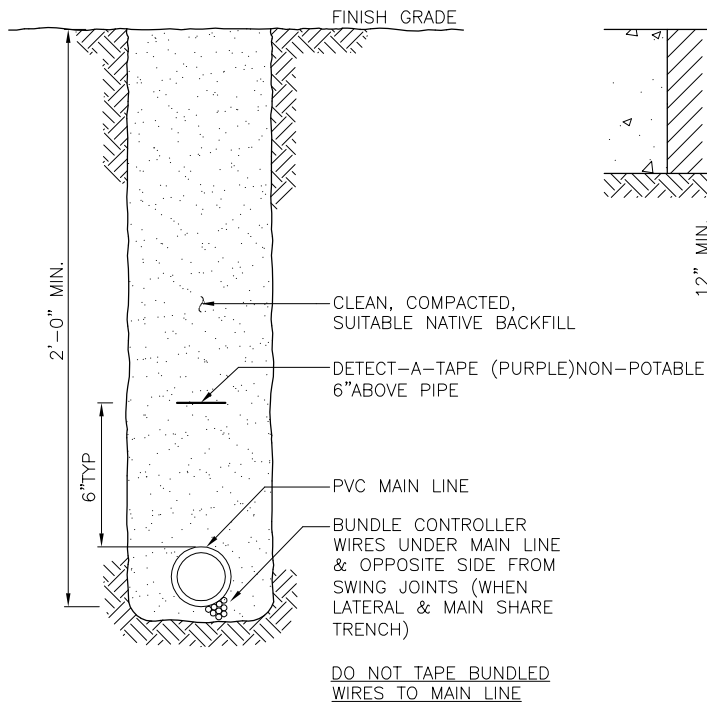
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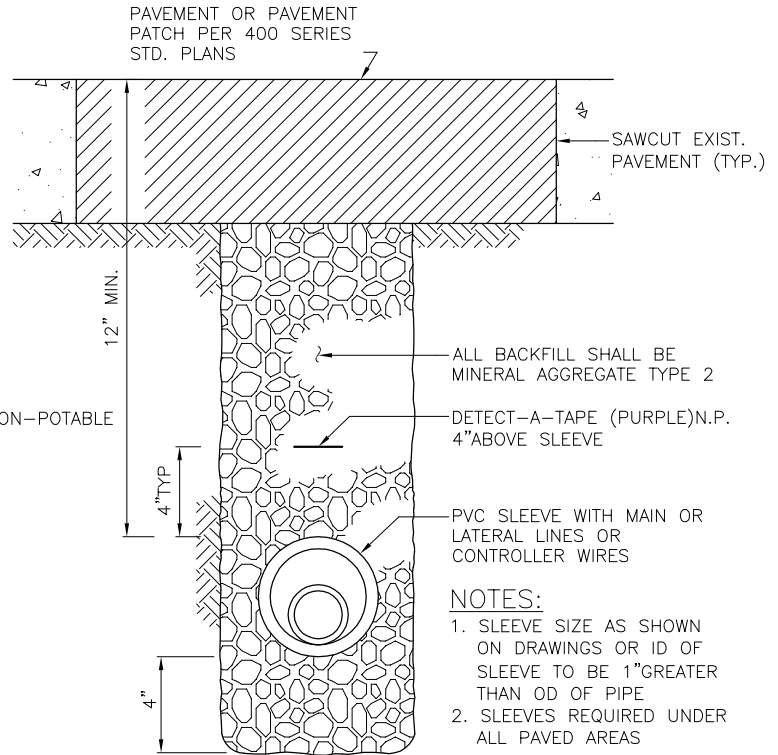
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NOT TO SCALE

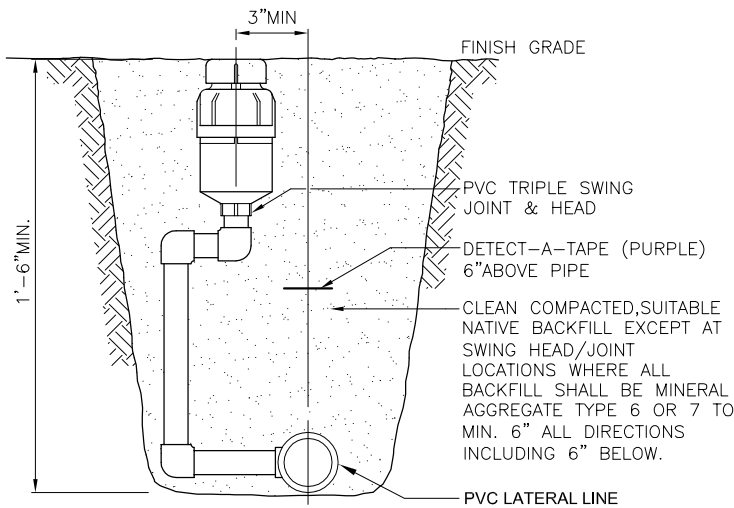
IRRIGATION CONTROLLER
PEDESTAL AND ENCLOSURE
GROUNDING



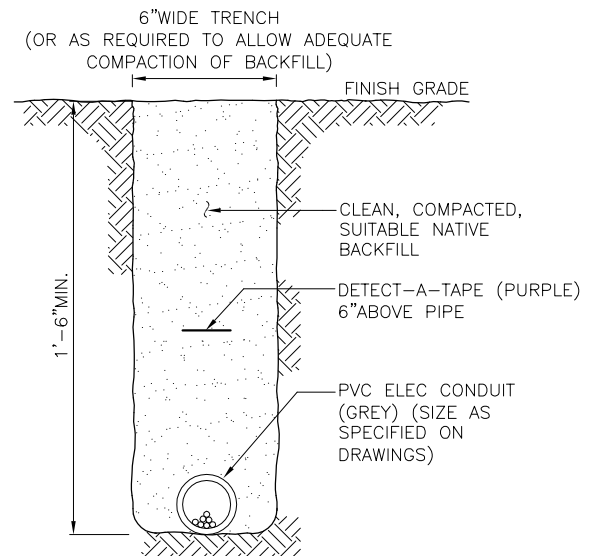
MAIN LINE



SLEEVE TRENCHING



LATERAL LINE



POWER SUPPLY TRENCH

REF STD SPEC SEC 8-03



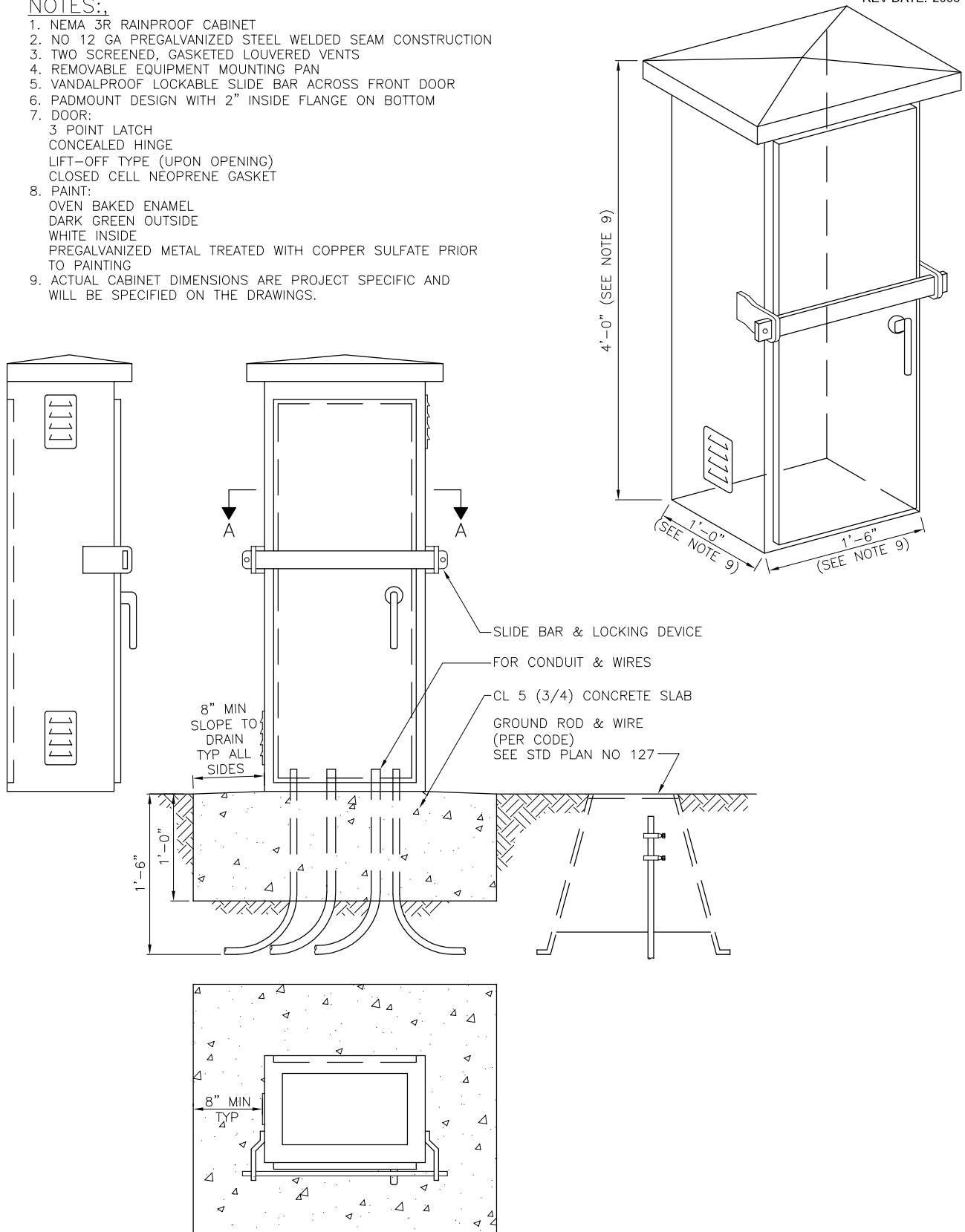
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NOT TO SCALE

IRRIGATION TRENCHES

NOTES:

1. NEMA 3R RAINPROOF CABINET
2. NO 12 GA PREGALVANIZED STEEL WELDED SEAM CONSTRUCTION
3. TWO SCREENED, GASKETED LOUVERED VENTS
4. REMOVABLE EQUIPMENT MOUNTING PAN
5. VANDALPROOF LOCKABLE SLIDE BAR ACROSS FRONT DOOR
6. PADMOUNT DESIGN WITH 2" INSIDE FLANGE ON BOTTOM
7. DOOR:
 - 3 POINT LATCH
 - CONCEALED HINGE
 - LIFT-OFF TYPE (UPON OPENING)
 - CLOSED CELL NEOPRENE GASKET
8. PAINT:
 - OVEN BAKED ENAMEL
 - DARK GREEN OUTSIDE
 - WHITE INSIDE
 - PREGALVANIZED METAL TREATED WITH COPPER SULFATE PRIOR TO PAINTING
9. ACTUAL CABINET DIMENSIONS ARE PROJECT SPECIFIC AND WILL BE SPECIFIED ON THE DRAWINGS.



REF STD SPEC SEC 8-03

SECTION A-A

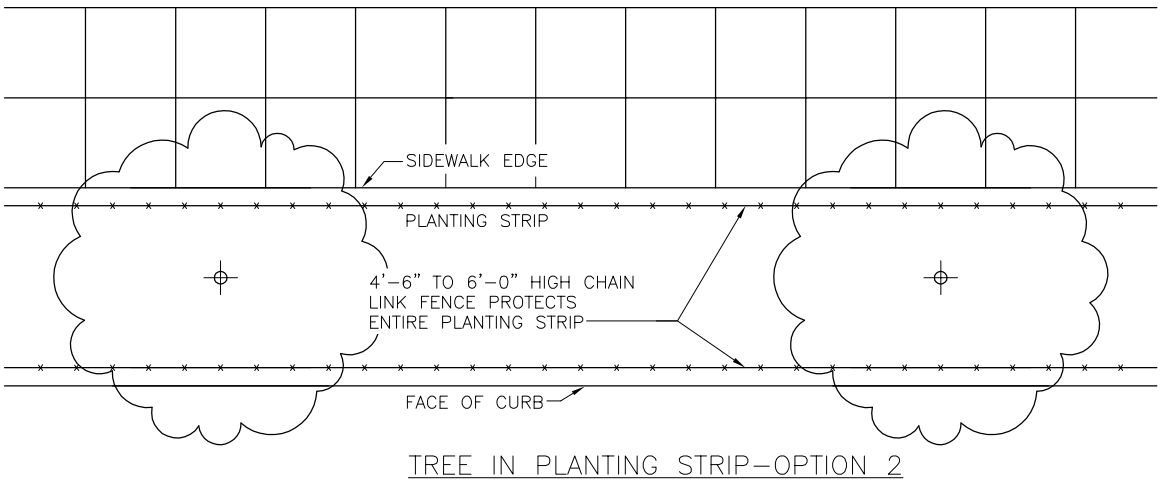
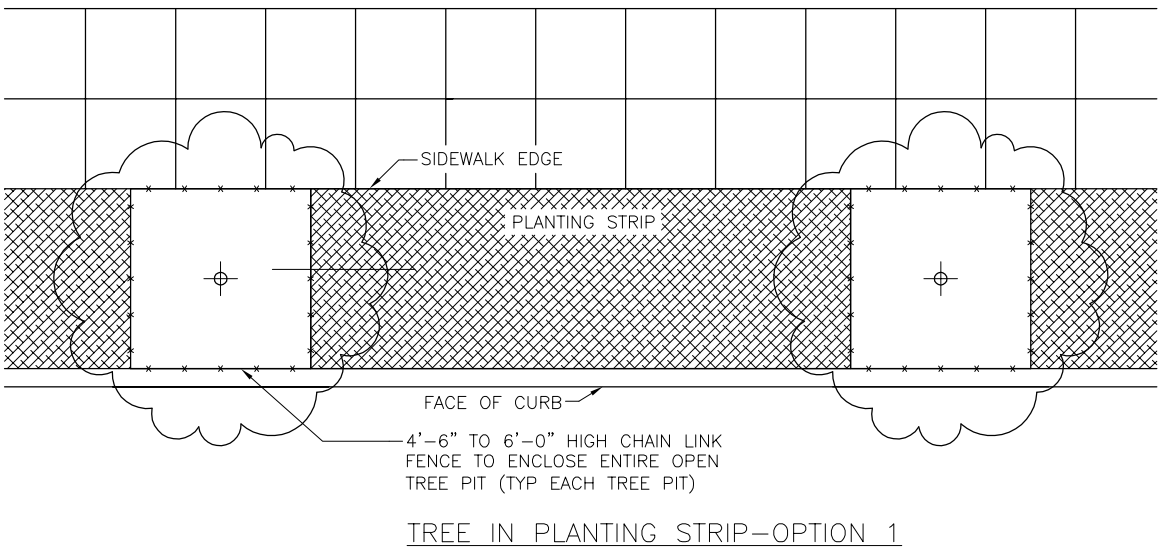
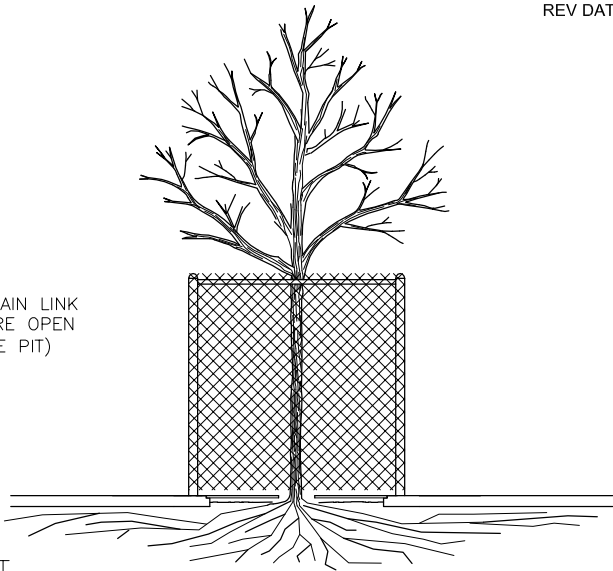
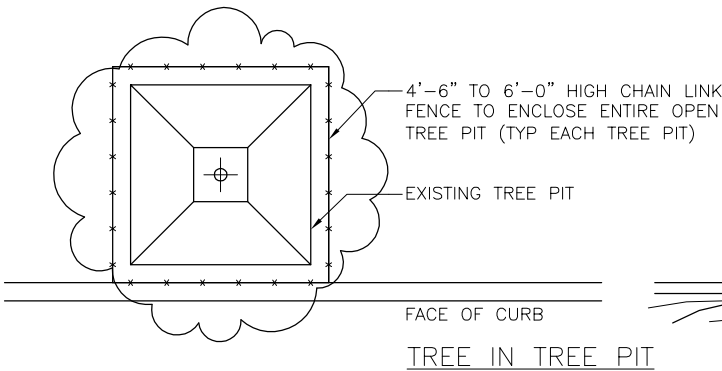


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IRRIGATION
CONTROLLER CABINET

NOTES:
CONSIDER TRAFFIC TURNING VISIBILITY AND
PEDESTRIAN VISIBILITY WHEN SELECTING FENCE
HEIGHT; TYPICALLY SHORTER FENCING AROUND TREE
PITS BETWEEN SIDEWALK AND ROADWAY IS DESIRED.



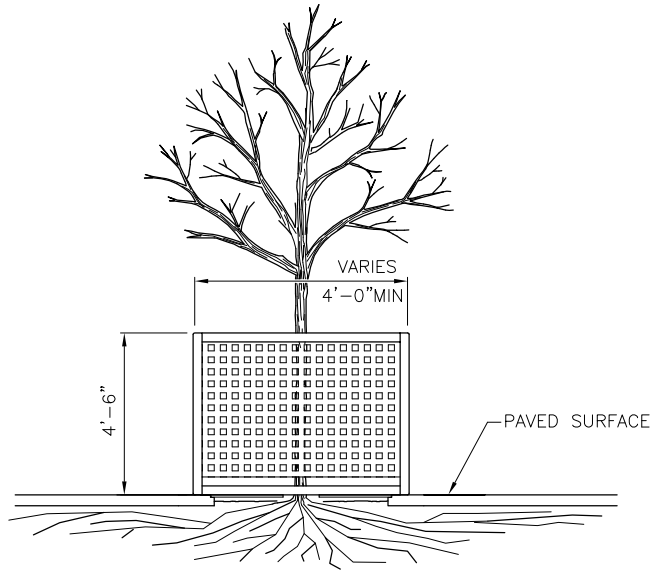
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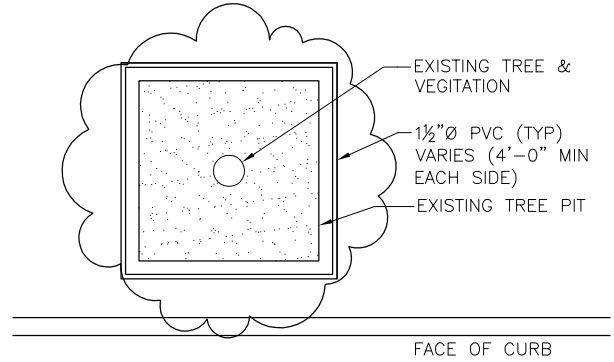
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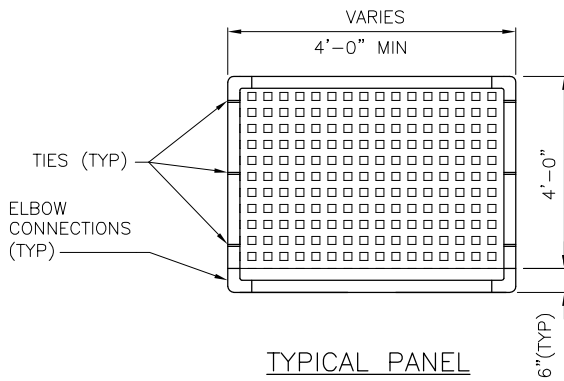
TREE PROTECTION
DURING CONSTRUCTION



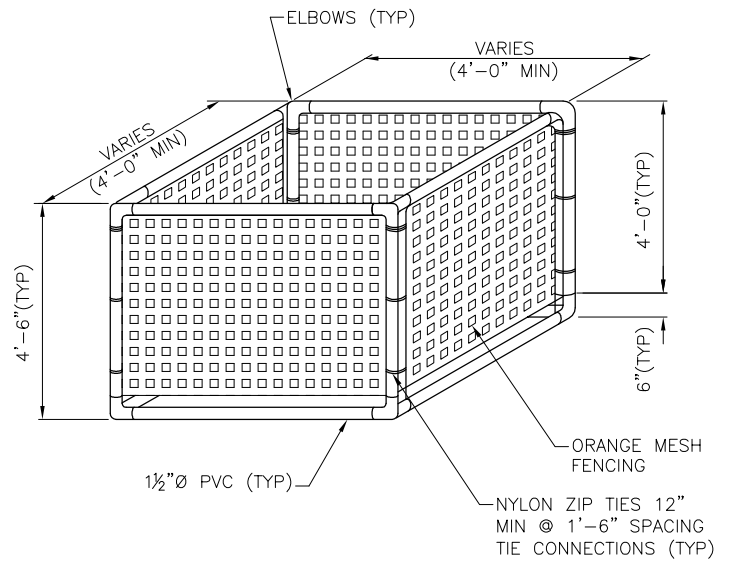
TYPICAL TREE GUARD RAIL



PLAN VIEW



TYPICAL PANEL



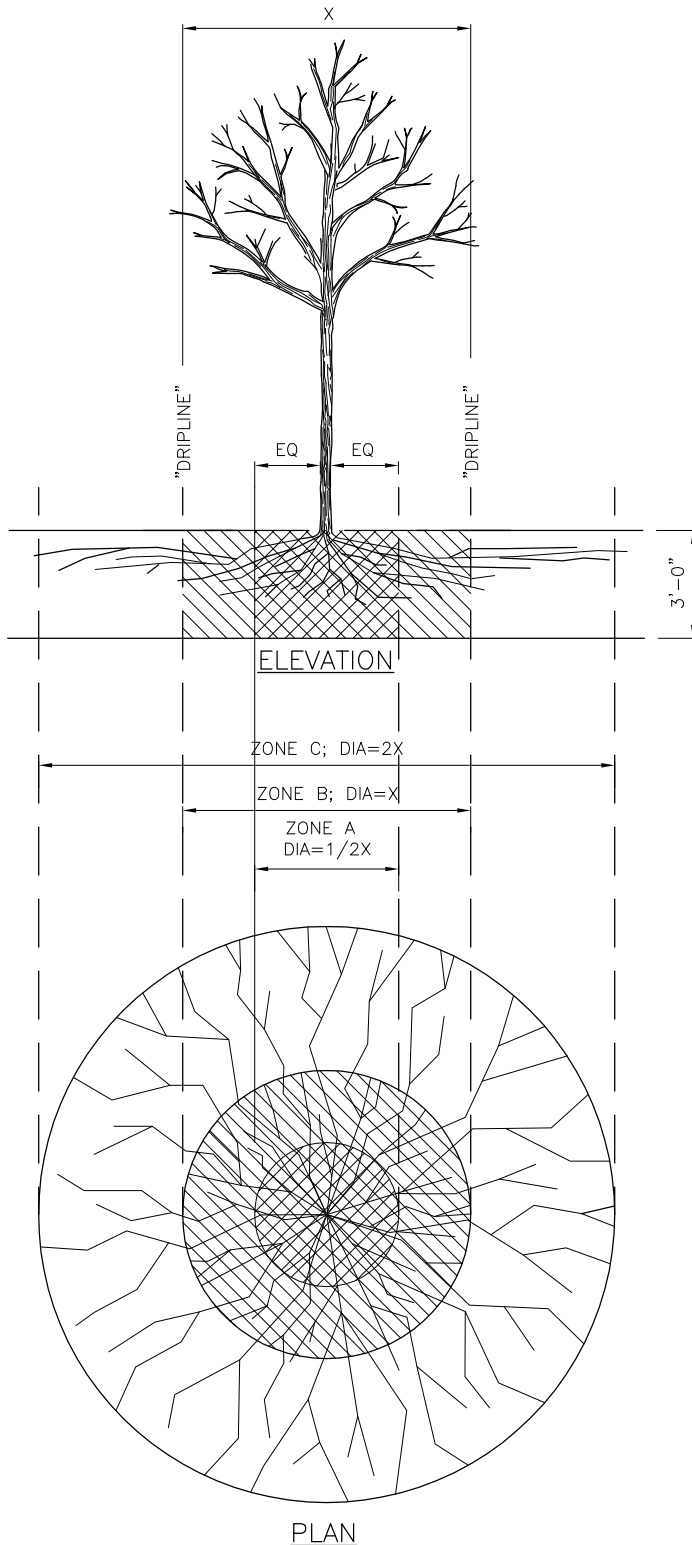
REF STD SPEC SEC 1-07.16(2) & 8-01



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REUSABLE TEMPORARY TREE
& LANDSCAPE PROTECTION
FENCE



A TREE, VEGETATION, AND SOIL PROTECTION PLAN (TVSPP) IS REQUIRED FOR ALL PROJECTS. APPROVAL OF PLAN REQUIRED PRIOR TO MOBILIZATION. SEE SECTION 8-01.

TRENCHING/EXCAVATION

ZONE A (CRITICAL ROOT ZONE)

1. NO DISTURBANCE ALLOWED WITHOUT SITE-SPECIFIC INSPECTION AND APPROVAL OF METHODS TO MINIMIZE ROOT DAMAGE
2. SEVERANCE OF ROOTS LARGER THAN 2" DIA REQUIRES ENGINEER'S APPROVAL
3. TUNNELING REQUIRED TO INSTALL LINES 3'-0" BELOW GRADE OR DEEPER

ZONE B (DRIPLINE)

1. ZONE B FOR ASYMMETRICAL COLUMNAR AND NARROW CONICAL TREE FORMS. ZONE B = 1' RADIUS FOR EVERY 1" OF TRUNK DIAMETER.
2. TUNNELING MAY BE REQUIRED FOR TRENCHES DEEPER THAN 3'-0".

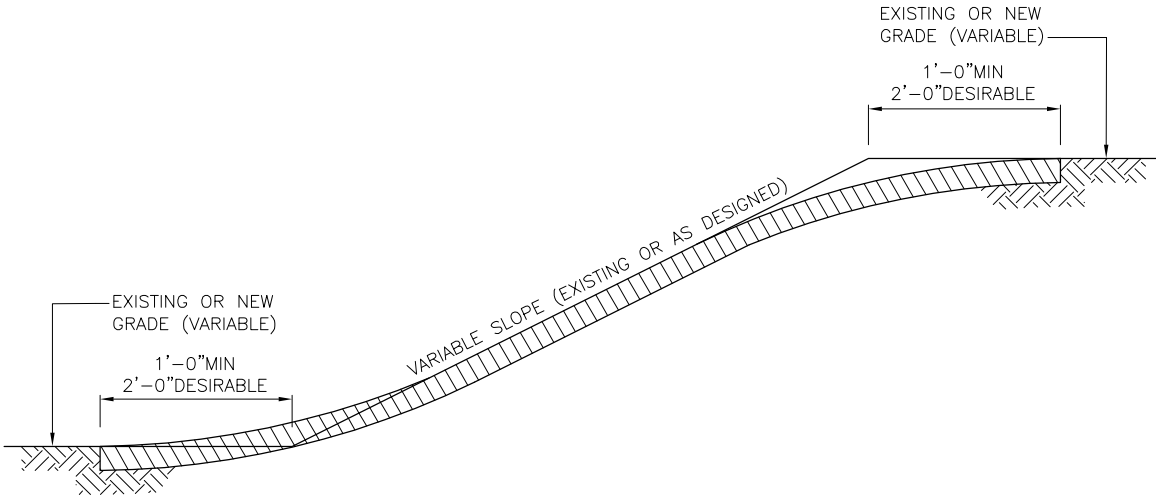
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**TREE PROTECTION DURING
TRENCHING, TUNNELING OR
EXCAVATION**



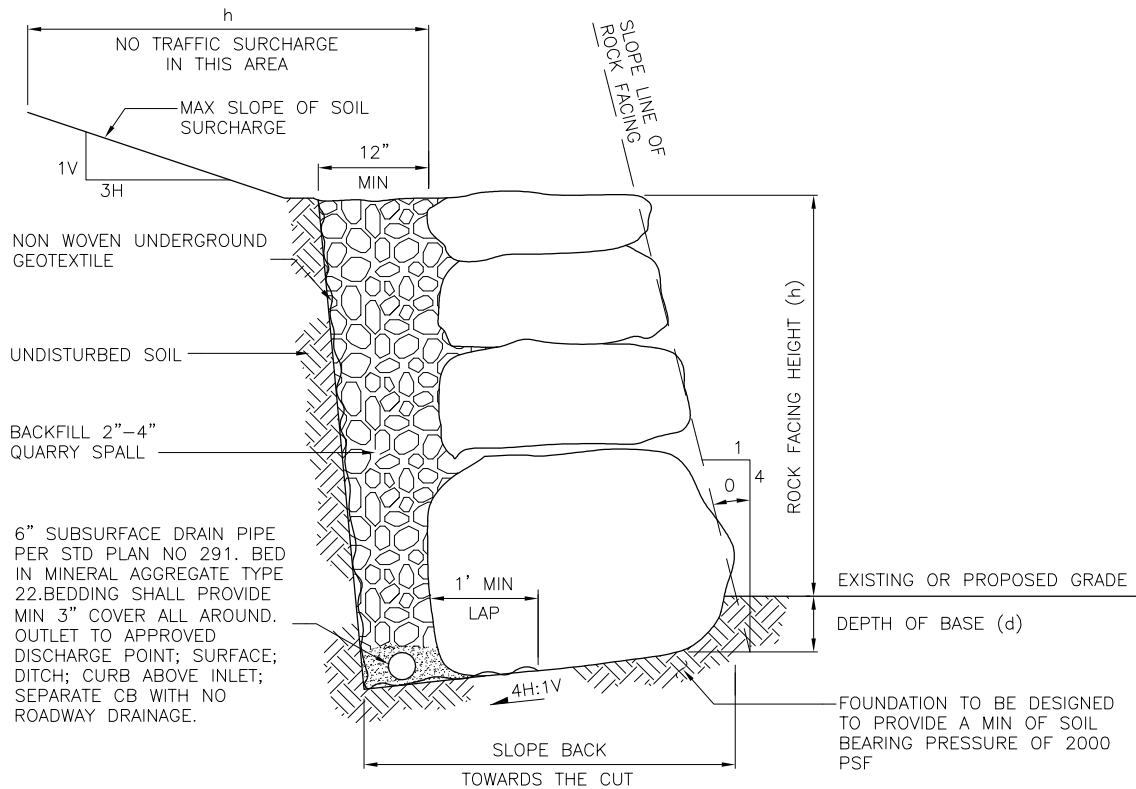
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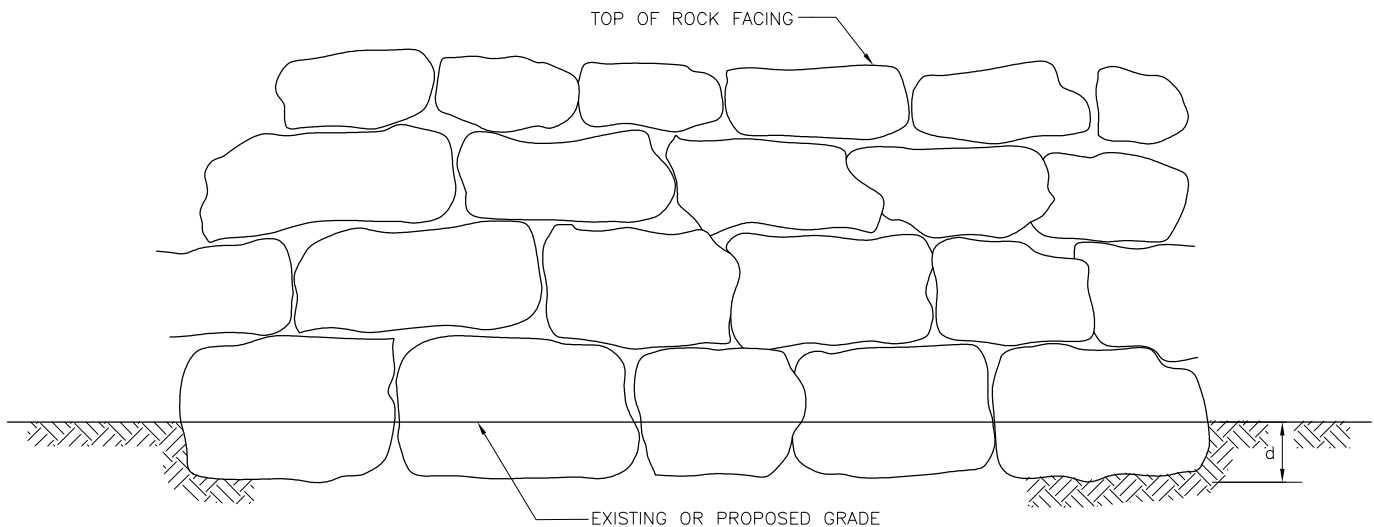
City of Seattle

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SLOPE ROUNDING



SECTION



ELEVATION

(h)	(d)	MINIMUM ROCK	
		SIZE(BASE)	SIZE(TOP)
2 FEET	3 INCHES	2-MAN	1-MAN
4 FEET	6 INCHES	3-MAN	2-MAN
6 FEET	9 INCHES	4-MAN	2-MAN
8 FEET	12 INCHES	5-MAN	2-MAN

Ø = 14" ± 1"

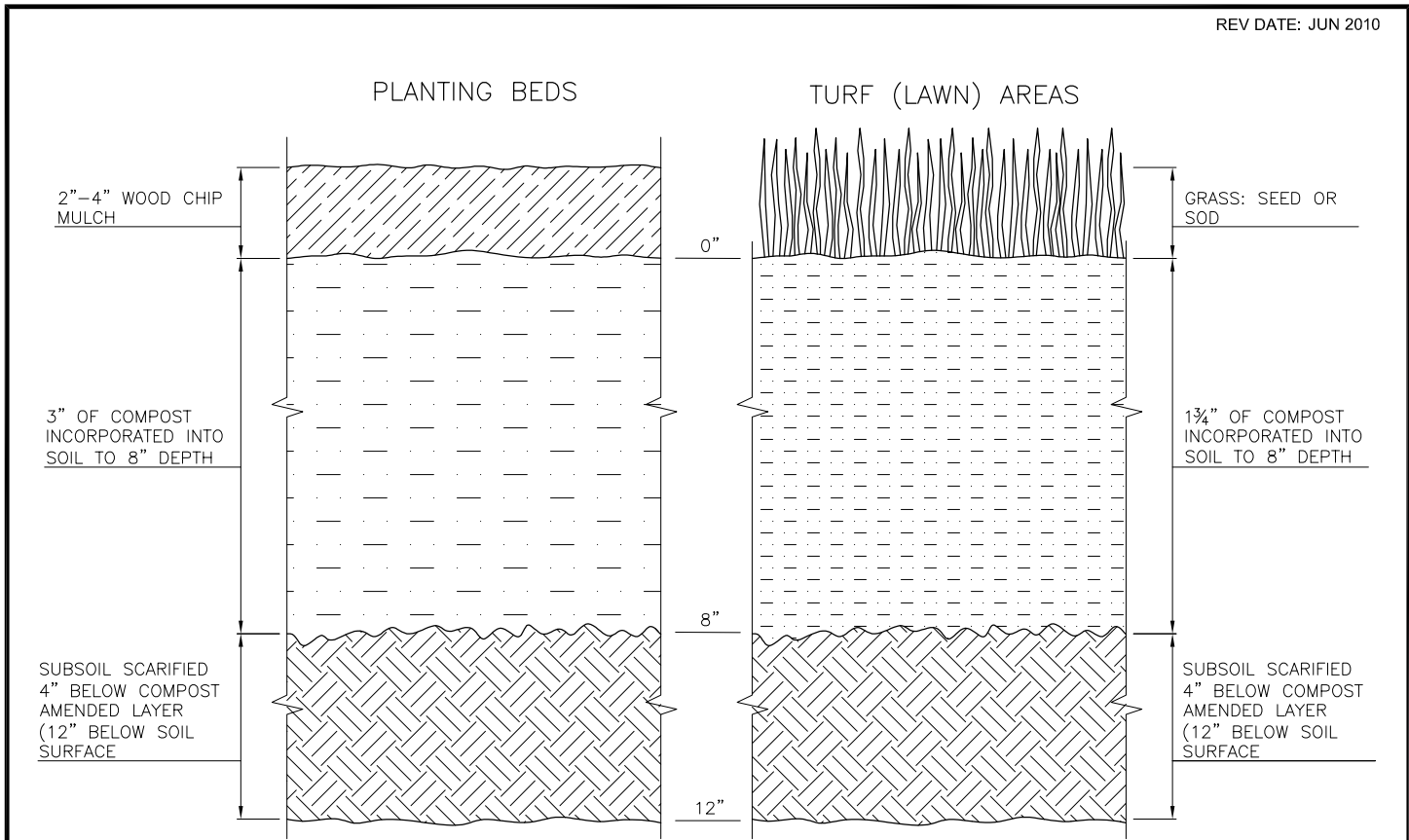
REF STD SPEC SEC 2-13



City of Seattle

NOT TO SCALE

ROCK FACING



- NOTES:
1. ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT, SHALL BE AMENDED WITH COMPOST TO A MINIMUM 8" DEPTH, AND SUBSOIL SCARIFIED 4" BELOW THAT COMPOST-AMENDED LAYER, FOR A FINISHED 12" OF UNCOMPACTED DEPTH IN ALL LANDSCAPE AREAS.
 2. PLANTING BED AND TURF AREA SOIL PREPARATION ARE THE SAME, EXCEPT FOR AMOUNT OF COMPOST AMENDMENT, AND MULCH ADDED TO PLANTING BEDS.
 3. COMPOST SHALL BE TILLED IN TO 8 INCH DEPTH INTO EXISTING SOIL, OR PLACE 8 INCHES OF COMPOST-AMENDED SOIL, PER SOIL SPECIFICATION. SUBSOIL SHALL BE SCARIFIED (LOOSENED) 4 INCHES BELOW AMENDED LAYER, TO PRODUCE 12-INCH DEPTH OF UN-COMPACTED SOIL, EXCEPT WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS.
 4. TURF AREAS SHALL RECEIVE 1.75 INCHES OF COMPOST TILLED IN TO 8-INCH DEPTH, OR PLACE 8" OF IMPORTED SOIL CONTAINING 20-25% COMPOST BY VOLUME. THEN PLANT GRASS SEED OR SOD PER SPECIFICATION.
 5. PLANTING BEDS SHALL RECEIVE 3 INCHES OF COMPOST TILLED IN TO 8-INCH DEPTH, OR PLACE 8" OF IMPORTED SOIL CONTAINING 35-40% COMPOST BY VOLUME. MULCH AFTER PLANTING, WITH 2-4 INCHES OF ARBORIST WOOD CHIP MULCH OR APPROVED EQUAL.
 6. REFER TO CITY OF SEATTLE STANDARD SPECIFICATIONS:
8-01 TREE, VEGETATION, AND SOIL PROTECTION PLAN (TVSPP).
8-02 TOPSOIL TYPE B.
9-14.1 TOPSOIL TYPE A - IMPORTED, TOPSOIL TYPE B - REUSED AMENDED SITE SOIL, PLANTING SOIL, AND TURF AREA SOIL, ARBORIST WOOD CHIP MULCH, AND COMPOSTED MATERIAL (COMPOST).

REF STD SPEC SEC 8-02



City of Seattle

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SOIL AMENDMENT AND DEPTH